South American Publishing

SAP Community and Interculturality in Dialogue. 2024; 4:126
doi: 10.56294/cid2024126

ORIGINAL

Comprehensive care strategy at El Guayabo Penitentiary Center

Estrategia de atención integral en el Centro Penitenciario El Guayabo

Douglas Crispin-Rodríguez[1], Douglas Crispin-Castellanos[2], Nila Ledesma-Céspedes[1], Gisier Reyes-Cortiña[1], Antonia María Lamorú-Pardo[3], Ennis Ivonnet-Gutiérrez[4]

[1]Facultad de Ciencias Médicas Isla de la Juventud. Policlínico Docente Universitario "Orestes Falls Oñate". Isla de la Juventud, Cuba.
[2]Universidad de la Isla de la Juventud "Jesús Montané Oropesa". Isla de la Juventud, Cuba.
[3]Facultad de Ciencias Médicas Isla de la Juventud. Policlínico Docente Universitario "Juan Manuel Páez Inchausti". Isla de la Juventud, Cuba.
[4]Facultad de Ciencias Médicas Isla de la Juventud. Isla de la Juventud, Cuba.

Cite as
Crispin-Rodríguez D, Crispin-Castellanos D, Ledesma-Céspedes N, Reyes-Cortiña G, Lamorú-Pardo AM, Ivonnet-Gutiérrez E. Comprehensive care strategy at El Guayabo Penitentiary Center. SAP Community and Interculturality in Dialogue. 2024; 4:126. https://doi.org/10.56294/cid2024126

Publication History
Submitted: 09-10-2023
Revised: 11-12-2023
Accepted: 16-02-2024
Published: 17-02-2024

Corresponding Author
Douglas Crispin-Rodríguez

ABSTRACT

Introduction: this research is based on the framework of comprehensive oral health care for people deprived of liberty, to ensure that health services ensure their continuity of care, with a quality of care similar to that accessed by the population does not have this limitation.
Objective: to develop a comprehensive oral health care strategy at the "El Guayabo" Penitentiary Center on the Isla de la Juventud from October 2021 to October 2022.
Method: an intervention study was carried out on 227 inmates, matching the universe and the sample. The variables were considered: age, oral diseases, level of oral health knowledge, oral health knowledge survey and results of the strategy. With prior informed consent, a survey of knowledge of oral health, Stomatological Clinical History, curative and rehabilitative treatment was carried out on each of the patients who were part of the research.
Results: before the intervention was applied, dental caries and poor level of knowledge predominated in 71,3 % and 66,9 % of the inmates respectively; managing to reduce the prevalence of dental caries and improve the level of knowledge to be regulated in the majority of inmates after applying the educational strategy; In addition, 47 % of the sample was cured.
Conclusions: the implementation of the comprehensive oral health care strategy had a significant impact on the reduction of oral diseases among inmates.

Keywords: Comprehensive Care; Oral Health; Oral Diseases; Promotion; Prevention.

RESUMEN

Introducción: la presente investigación se sustenta en el marco de la atención integral a la salud bucal de las personas privadas de libertad, para lograr que los servicios de salud aseguren su continuidad asistencial, con una calidad de atención similar a la que accede la población que no posee esta limitación.
Objetivo: desarrollar una estrategia de atención integral de salud bucal en el Centro Penitenciario "El Guayabo" de la Isla de la Juventud desde octubre de 2021 hasta octubre de 2022.
Método: se realizó un estudio de intervención en 227 internos, coincidiendo el universo y la muestra. Se tuvieron en cuenta las variables: edad, enfermedades bucales, nivel de conocimiento de salud bucal, encuesta de conocimientos de salud bucal y resultados de la estrategia. Previo consentimiento informado se realizó una encuesta de conocimiento de salud bucal, Historia Clínica Estomatológica, tratamiento curativo y rehabilitador a cada uno de los pacientes que formaron parte de la investigación.
Resultados: antes de aplicada la intervención predominó la caries dental y el mal nivel de conocimiento en el 71,3 % y 66,9 % de los internos respectivamente; logrando disminuir la prevalencia de la caries dental y mejorar el nivel de conocimiento a regular en la mayoría de los reclusos después de aplicada la estrategia educativa; además se logró sanear al 47 % de la muestra.
Conclusiones: la implementación de la estrategia de atención integral de salud bucal tuvo un impacto significativo en la reducción de las enfermedades bucales de los internos.

Palabras clave: Atención Integral; Salud Bucal; Enfermedades Bucales; Promoción; Prevención.

© 2024; The Authors. This Open access article is distributed under the Creative Commons Attribution 4.0 license (https://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

The physical and mental health of inmates is one of the most critical and vulnerable aspects of prison life. The prisoner is an individual who has the same rights as the rest of the population. However, his main limitation, with the criminal sanction he is serving, is constituted by free movement because it puts him at a disadvantage, as it establishes a restriction on free access to health care.[1]

Governments must implement legislation with consistent policies and programs based on international human rights standards to ensure that inmates are provided with health care equivalent to that available to the rest of the community outside the prison.[1]

In a society framed by processes of change, where the rights of persons deprived of liberty are recognized and progress is made in the protection and improvement of their living conditions inside the penitentiary centers where they serve their sentences, it becomes imperative that the organization in charge of health care in these institutions respects the guidelines outlined by the National Integrated Health System (SNIS) and becomes: "an integrated system of health services at all levels and of national scope that provides universal access and coverage for all inhabitants with adjustment of priorities according to their specific needs." [1]

In Cuba, the Penitentiary System is in charge of guaranteeing the execution process of the correctional work sanction with internment, the educational security measure of internment, and the precautionary measure of provisional imprisonment. The organization of Cuban penitentiary establishments and centers has, first of all, a territorial conception that coincides with the political-administrative division of the country.[2]

There are three penitentiary centers on the Isle of Youth, one open as part of the Tarea Confianza or Tarea 500 plan carried out in the territory. The other two remaining centers are closed; that is, they maintain strict security control through the perimeter fence cordons and permanent surveillance by garrison officers, which prevents inmates from having unrestricted access to other detachments and premises inside the prison.[3]

The "El Guayabo" Penitentiary Center has been operating for more than 30 years as a closed center in a place distant from the main cities of the Isle of Youth. The Internal Order Officers who work there are generally young people who require better preparation to assume the educational task with greater interest and dedication since, in the facility, the situation of the organic operation is more complex once the prison population is much larger. There are inmates incarcerated for different types of crimes, which makes the educational task much more challenging to undertake.[3]

For a long time, people considered the loss of teeth as something natural, characteristic of advancing age. With the development of society and the increase in education, people became aware of the need to preserve and maintain healthy teeth. However, as this philosophy has not reached everyone equally, it has become a challenge for stomatologists, stomatological care technicians, and anyone whose purpose is to guarantee to some extent the correct functioning of oral health, to make people aware of the importance of maintaining optimal hygiene conditions to avoid tooth loss.[4]

Oral hygiene is an activity that should be part of every person's daily habits, with brushing and flossing being two of the most critical activities. However, the Ilustre Colegio Oficial de Odontólogos y Estomatólogos de Aragón (Official College of Dentists and Stomatologists of Aragón) assures that mistakes are often made that can become the worst enemies for the health of the teeth, causing some of the most common oral diseases.[5]

Regardless of the stomatological care provided in the "El Guayabo" penitentiary center since its creation, it has been possible to verify through empirical observation a large number of patients affected by different oral diseases, as well as the little knowledge they have about the risk factors that trigger these diseases and the possible damage they can cause to their health. The above, added to the few studies developed in the Special Municipality Isla de la Juventud about the subject, constituted the motivation for developing the present research.

Considering the background, the following scientific problem was formulated: What benefits will the development of an integral oral health care strategy have on the oral diseases of the inmates of the "El Guayabo" Penitentiary Center of the Isle of Youth? Therefore, the objective was to develop a strategy for comprehensive oral health care in the "El Guayabo" Penitentiary Center of the Isle of Youth from October 2021 to October 2022.

METHOD

An intervention study was conducted at the "El Guayabo" Penitentiary Center, La Fe, Isla de la Juventud, from October 2021 to October 2022.

Universe and sample

The universe was made up of the inmates of the center (227); the sample coincides with the universe studied.

The research process used empirical (documentary analysis, observation, survey, experiment), theoretical (analytical-synthetic, inductive-deductive, historical-logical analysis, system approach), and mathematical-statistical methods. Microsoft Office 2016 Excel Spreadsheet was used for data processing. From the descriptive statistics, empirical distributions of relative frequency and their corresponding percentage distributions were used, making the qualitative interpretation of the data recorded in the survey possible. This method was used for the elaboration of the tables.

Variables

Dependent: oral diseases, level of oral health knowledge, and strategy results.

Independent: Oral health knowledge survey.

External: age.

With prior informed consent, a clinical stomatological history was taken, an oral health knowledge survey was administered before and after the intervention, and curative and rehabilitative treatment was given to each of the patients who took part in the study.

RESULTS

The most representative age group was 35-59 years old with 126 interns for 55,3 % (table 1).

Table 1. Distribution of inmates according to age groups in the "El Guayabo" Penitentiary Center. La Fe. 2021-2022

Age groups	No	%
18 – 19	6	2,6
20 – 34	91	40,1
35 – 59	126	55,3
60 – 74	4	1,8
Total	227	100

Before applying the strategy, it was observed that the most prevalent oral disease was dental caries, affecting 71,3 % of the sample studied, followed by other diseases, such as masticatory dysfunction, at 61,6 %, and periodontal disease, at 59,4 % (table 2).

Table 2. Distribution of inmates of the "El Guayabo" Penitentiary according to oral diseases before the strategy was applied. La Fe. 2021-2022

Age groups	Dental caries		Periodontal diseases		Masticatory dysfunction		Oral mucosal lesions		ATM	
	No	%	No	%	No	%	No	%	No	%
18 – 19	3	1,3	3	1,3	-	-	-	-	-	-
20 – 34	71	31,3	45	19,8	37	16,3	-	-	1	0,4
35 - 59	85	37,4	87	38,3	100	44,1	5	2,2	3	1,3
60 – 74	3	1,3	-	-	4	1,2	-	-	-	-
Total	162	71,3	135	59,4	141	61,6	5	2,2	4	1,7

Once the strategy was implemented, the following results were observed: a decrease in dental caries to 35,6 % of the total number of patients affected; also, masticatory dysfunction decreased to 52,8 % and periodontal disease to 42,7 % (table 3).

Table 3. After the strategy was applied, distribution of the inmates of the "El Guayabo" Penitentiary Center according to oral diseases. La Fe. 2021-2022

Age groups	Dental caries		Periodontal diseases		Masticatory dysfunction		Oral mucosal lesions		ATM	
	No	%	No	%	No	%	No	%	No	%
18 – 19	-	-	-	-	-	-	-	-	-	-
20 – 34	31	13,6	30	13,2	32	14,1	-	-	1	0,4
35 - 59	50	22	67	29,5	85	37,4	-	-	3	1,3
60 – 74	-	-	-	-	3	1,3	-	-	-	
Total	81	35,6	97	42,7	120	52,8	-	-	4	1,7

Tabla 4. Distribución de los internos del Centro Penitenciario “El Guayabo” según nivel de conocimiento de educación para la salud bucal antes de aplicada la estrategia. La Fe. 2021-2022

Age groups	Good		Fair		Bad		Total
	No.	%	No	%	No	%	No
18 a 19	2	0,9	4	1,8	-	-	6
20 a 34	-	-	15	6,6	76	33,5	91
35 a 59	-	-	53	23,3	73	32,2	126
60 a 74	-	-	1	0,4	3	1,3	4
Total	2	0,9	73	32,1	152	66,9	227

Antes de la intervención, predominó un mal nivel de conocimiento sobre salud bucal en el 66,9 % de los internos, obteniendo solo 2 de ellos un buen nivel de conocimiento para un 0,9 % (tabla 4).

Once the strategy proposed for this study was applied, the level of knowledge predominated in 49,8 % of the inmates, increasing to good in 51 inmates for 22,5 % (table 5).

Table 5. After the strategy was applied, the "El Guayabo" Penitentiary Center inmates were distributed according to their knowledge of oral health education. La Fe. 2021-2022

Age groups	Good		Fair		Bad		Total
	No.	%	No	%	No	%	No
18 a 19	4	1,8	2	0,9	-	-	6
20 a 34	15	6,6	45	19,8	31	13,6	91
35 a 59	28	12,3	66	29,1	32	14,1	126
60 a 74	4	1,8	-	-	-	-	4
Total	51	22,5	113	49,8	63	27,7	227

Once the strategy was applied, 47 % of the inmates were rehabilitated, and 9.2 % were rehabilitated (table 6).

Table 6. Results of the strategy in the "El Guayabo" Penitentiary Center. La Fe. 2021-2022

Age groups	Examined	Sanitized		Sick		Rehabilitated	
		No.	%	No.	%	No.	%
10 a 19	6	6	2,6	-	-	-	-
20 a 34	91	45	19,8	46	20,3	5	2,2
35 a 59	126	53	23,3	73	32,1	15	6,6
60 a 74	4	3	1,3	1	0,4	1	0,4
Total	227	107	47	120	52,8	21	9,2

DISCUSSION

The results of the present investigation disagree with those obtained in studies in Uruguay [6] and El Salvador[7], where the age group of 26 to 35 years predominated in 73 % and 40.5 % of the inmates, respectively.

Oral health is part of general health since an individual cannot be considered entirely healthy without oral disease. Of the oral diseases, the most frequent worldwide are dental caries and periodontopathies, which vary only in severity and prevalence and also among different age groups.[8]

The authors of this research assume that these results are due to elements such as deficient oral hygiene and the type of diet based on the consumption of sugar, adhesive foods, and other fermentable carbohydrates that stimulate the production of acids by acidogenic microorganisms. It can also be given by individual predisposition that depends on the characteristics of the enamel, the presence of Streptococcus mutans, and salivary viscosity, among others.

The results obtained in the present investigation are related to the strategic objectives designed in the strategy; the same were not completely fulfilled due to:

- Treatment could not be completed for 100 % of the inmates of the “El Guayabo” Penitentiary Center since, on occasion, it was not possible to obtain the inmates’ attendance at the consultation due to internal operational problems.
- It was impossible to systematically develop inter-consultation with specialists of the second level of care because sometimes the transportation of inmates outside the prison did not materialize.
- It was not possible to carry out stomatological rehabilitation for 100 % of the inmates because there are no technical conditions within the prison to carry out such activities; on many occasions, it was not possible to transport the inmates outside the prison, preventing full compliance with the treatment.

According to information from the World Health Organization (WHO) database on oral diseases, there are notable differences between the different regions of the world. In recent years, the prevalence of dental caries has declined significantly in highly developed countries such as the USA and Scandinavian countries.[9] In underdeveloped countries, the increase in dental caries has been particularly marked.

In underdeveloped countries, the prevalence of dental caries is due to a constant increase in the consumption of carbohydrates, the irregular incorporation of fluoride programs when they exist, and the lack of preventive and comprehensive programs offered to the population in dental services.[9]

In Cuba, dental caries first appear among oral diseases, followed by periodontopathic, considered, according to the literature, to be universal, and about 70 % of the population suffers from them.[9]

The results obtained in the research are similar to those obtained in a study carried out in Ecuador[10], where the most prevalent oral disease in the inmates was dental caries at 35 %, followed by masticatory dysfunction at 20 % and periodontal disease at 15 %.

Before the strategy was applied, there needed to be a dominant level of knowledge. In the opinion of the authors of this study,

this is because the great majority of the children do not brush their teeth as often as they should; because of the conditions in which they live, they neglect their hygiene, and they do not know about the damage caused to their oral health by the ingestion of hard and sticky foods such as cookies and sweets, and the practice of harmful habits such as smoking.

Once the strategy proposed for this study was applied, a series of educational activities were carried out to modify the inmates' knowledge about oral health, obtaining a predominance of regular knowledge on the part of the inmates because promotion and prevention activities were carried out supported by lecture and demonstration techniques on the following topics: form and frequency of tooth brushing, self-examination of the oral complex, damage caused to oral health by the harmful habit of smoking and the interrelation between chronic diseases and oral diseases.

It should be noted that due to the characteristics in which the study was carried out, it is difficult to change people's mentality in order to improve their oral health. However, it was possible to confirm that changes in people's thinking can be achieved if we know how to apply the appropriate procedures to develop preventive work.

The results obtained before the intervention coincide with those obtained in a study in India[9], where 47 % of the inmates rated their level of knowledge as poor.

Other authors have had similar results, as is the case of Dr. Cabrera-Acosta et al.[11] in their study conducted at the Center for Youth Care in Sancti Spíritus with a population of 42 inmates, who presented a poor level of knowledge of oral health before the intervention with 64,3 %.

The present research also coincides with several studies where once the educational intervention was implemented, the level of knowledge initially found was positively increased.[11,12,13,14,15]

Almost half of the "El Guayabo" Penitentiary Center inmates were rehabilitated. The authors of this research assume that these results are due to the implementation of the following activities:

- Promotion and prevention activities: educational interviews on the topics above.
- Curative treatments: Cavities were prepared for restoration with silver amalgam and light-curing resin, gastrectomies, exodontia when necessary, and endodontic treatments; the latter could only be performed on one inmate because this procedure requires X-ray equipment, which the center does not have, so it is necessary for the inmate to leave the prison and sometimes this is not easy.
- Referral to the second level of care: 5 patients with mucosal lesions diagnosed as keratosis associated with smoking were satisfactorily treated in the Maxillofacial Surgery service. In the Periodontics service, only three patients attended the "Orestes Falls Oñate" Polyclinic. In the Prosthesis service, only 21 patients were rehabilitated, highlighting that most of them received part of their treatment inside the prison thanks to the service provided by the prosthesis personnel of the "Juan Manuel Páez Inchausti" Polyclinic and the "Orestes Falls Oñate" Polyclinic.

No significant results were achieved in the implementation of the strategy due to the following reasons:

- A high demand from inmates for dental treatment made it impossible to treat a more significant number of patients.
- Due to internal problems, mixing inmates from one building to another was impossible, making it challenging to complete their treatment.
- Transferring inmates outside the prison, mainly for secondary care treatment, was difficult at certain times.
- No bibliography was found on strategies for comprehensive oral health care in prisons that address results similar to those obtained in this research concerning the last table.

CONCLUSIONS

In the inmates of the "El Guayabo" Penitentiary Center on the Isle of Youth, 35-59 years, they predominated. The most frequent oral diseases identified were dental caries, masticatory dysfunction, and periodontal disease. The inmates' level of oral health knowledge was raised from bad before to fair after the strategy was implemented. Implementing the comprehensive oral health care strategy significantly impacted the reduction of oral diseases among the inmates of the "El Guayabo" Prison on the Isle of Youth.

FINANCING

No external financing.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHORSHIP CONTRIBUTION

Conceptualization: Douglas Crispin-Rodríguez, Douglas Crispin-Castellanos, Nila-Ledesma Céspedes.

Research: Douglas Crispin-Rodríguez, Douglas Crispin-Castellanos, Nila Ledesma-Céspedes, Gisier Reyes-Cortiña, Antonia María Lamorú-Pardo, Ennis Ivonnet-Gutiérrez.

Data curation: Douglas Crispin-Rodríguez, Nila Ledesma-Céspedes, Gisier Reyes-Cortiña.

Formal analysis: Douglas Crispin-Castellanos, Antonia María Lamorú-Pardo, Ennis Ivonnet-Gutiérrez.

Methodology: Douglas Crispin-Rodríguez, Douglas Crispin-Castellanos.

Writing - original draft: Douglas Crispin-Rodríguez.

Writing - revision and editing: Douglas Crispin-Castellanos, Ennis Ivonnet-Gutiérrez.

BIBLIOGRAPHIC REFERENCES

1. OPS Europa. "Prisons and health" World Health Organization, Regional Office for Europe, UNOCD, ICR, Consejo de Europa, Confederación Suiza 2014. https://www.paho.org/uru/index.php?option=com_docman&view .

2. UNODC. Buenas prácticas en la aplicación de las Reglas de Bangkok en Cuba. La Habana; 2015. https://www.unodc.org/documents/ropan/Reglas_de_Bangkok/CUBA.pdf

3. Rivas-González H. La consecución de los fines de la pena en el establecimiento penitenciario "El Guayabo" del municipio especial Isla de la Juventud. UIJ; 2013. https://biblioteca.uij.edu.cu/wp-content/uploads/2018/03/Héctor-Rivas- González.pdf

4. INFOMED. Vigilancia en Salud. Página Web del MINSAP. La Habana; 2000.

5. Heraldo.es. ¿Cuáles son las enfermedades bucodentales más comunes? España; 2018. https://www.heraldo.es/noticias/salud/2018/04/24/cuales-son-las-enfe ...

6. Vigna A. Análisis de datos del I Censo Nacional de Reclusos, desde una perspectiva de Género y Derechos Humanos. Uruguay; 2012. http://www.minterior.gub.uy/index.php/es/documentos-importantes/777-censo-nacionalidad-de-reclusos

7. Andrade L, Carrillo A. El sistema penitenciario salvadoreño y sus prisiones. El Salvador: Iudop; 2015. http://www.uca.edu.sv/iudop/wp-content/uploads/El-sistema-penitenciario-salvadore%C3%B1o-y-sus-prisiones.pdf

8. Pedraza-Viltres G, Rabilero-Arderi JR, Reyes-Pena JM, García-Estrada CB. Salud bucal, estudio de 6 meses. Cuba: Multimed; 2017. http://www.medigraphic.com

9. Digra R, Gupta N, Arora V, Gupta P. Oral health knowledge, attitude and practice (KAP) among prison inmates of Ambala District, Haryana. India: OAT; 2015. https://doi.org/10.15761/DOCR.1000124

10. Sánchez-Nolivos SJ. Estado de Salud Bucal de los Internos de Pabellón A de la Penitenciaria del Litoral. Ecuador. 2017. https://repositorio.uleam.edu.ec/handle/123456789/323

11. Cabrera-Acosta M, Morgado-Elena D, Betancourt-Rodríguez M, Arencibia-Castillo Y. Programa Educativo de salud bucodental en reclusos del Centro de Atención al Joven. Sancti Spíritus. Gac Méd Espirit 2019. http://revgmespirituana.sld.cu

12. Montano-Silva RM, Matos-Arias S, Hernández-Álvarez D, Abraham-Millán Y, Ruiz-Salazar R. Community Oral Health Promotion: Evaluation of an Educational Intervention for the Prevention of Oral Cancer and Premalignant Lesions. Community and Interculturality in Dialogue. 2021; 1:19. https://doi.org/10.56294/cid202119

13. Montano-Silva RM, Padín-Gámez Y, Abraham-Millán Y, Ruiz-Salazar R, Leyva-Samuel L, Crispín-Rodríguez D. Community intervention on oral cancer in high risk patients. Community and Interculturality in Dialogue 2022; 2:37. https://doi.org/10.56294/cid202237

14. Montano-Silva RM, Fernández-Breffe T, Abraham-Millán Y, Céspedes-Proenza I, Pantoja-García E. «Tooth fairy» educational strategy for infants in the fifth year of life. Community and Interculturality in Dialogue 2023; 3:77. https://doi.org/10.56294/cid202377.

15. Mora-Pérez E, Robaina-Rivero ER, Blanco-Mederos FM, Fleitas-Echeverría D. intervención educativa sobre salud bucal en adulto mayor institucionalizado portador de prótesis. Anatomía Digital 2021; 4(1), 65-76. https://doi.org/10.33262/anatomiadigital.v4i1.1482